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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/604,705	08/12/2003	Alianna J. Maren		1704

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EAGLEFORCE ASSOCIATES, INC.
2010 CORPORATE RIDGE
MCLEAN, VA 22102

EXAMINER
PHAM, KHANH B

ART UNIT	PAPER NUMBER
2166	

DATE MAILED: 08/23/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/604,705	MAREN ET AL.	
	Examiner	Art Unit	
	Khanh B. Pham	2166	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *15 May 2006*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *17-38* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *17-38* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *5/15/06 $ 7/24/06*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

1. The amendment filed May 15, 2006 has been entered. Claims 20, 27, 32 have been amended. Claims 35-38 have been added. Claims 17-38 are pending in this Office Action.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. **Claims 35, 38** are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

4. **Claim 35** recites the limitation "the plurality of processors" in line 19. There is insufficient antecedent basis for this limitation in the claim.

5. **Claim 38** recites the limitation "the feedback controller" in line 1. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States

only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

7. **Claims 17-28, and 33, 35-38** are rejected under 35 U.S.C. 102(e) as being anticipated by Blair et al. (US 2002/0007373A1), hereinafter "Blair."

As per claim 17, Blair teaches a system for identifying elements in a dataset including structured, semi-structured or unstructured data comprising a plurality of elements from a plurality of data sources, wherein each of the plurality of elements includes at least one corresponding metatag indicative of content of the corresponding element (Figs. 3, 19), comprising:

- "a plurality of processing levels, wherein each processing level includes a processor configured to identify a group of elements that satisfy a set of criteria" at page 5, [0101]-[0103] and Fig. 30;
- "and a filter configured to extract a subset of the group of elements identified by the processor that satisfy a selection criteria and provide the subset of elements to a next processing level" at page 5, [0112]-[0114];
- "a feedback component configured to provide a feedback loop between two of the processing levels at Figs. 30, 37;
- "wherein the feedback component is configured to provide a portion of the group of elements identified by one of the processing levels to another one of the processing levels" at page 5,[0105], [0114], [0118] and Figs. 30, 37;

- "so that the processing level receiving the portion of the group of elements identifies a new group of elements contained in the portion of the group of elements provided by the feedback component" at page 5,[0105], [0114].

As per claim 18, Blair teaches the system of claim 17, further comprising: "a utility component configured to control the feedback component, wherein the utility component is configured to determine which portion of the elements are provided to a particular one of the processing levels" at page 5, [0112]-[0114].

As per claim 19, Blair teaches the system of claim 18, wherein "the utility component is configured to determine the number of times the feedback component provides the portion of the group of elements to the particular processing level" at page 5, [0118].

As per claim 20, Blair teaches a system for identifying elements in a dataset including structured, semi-structured or unstructured data comprising a plurality of elements from a plurality of data sources, wherein each of the plurality of elements includes at least one corresponding metatag indicative of content of the corresponding element (Figs. 3, 19), comprising:

- "a plurality of processors, wherein each processor is configured to identify a group of elements that satisfy a set of criteria" at page 5, [0112]-[0114] and Fig. 30;

- "a plurality of filters, wherein each filter is configured to extract a subset of the group of elements identified by one of the processors that satisfy a selection criteria and provide the subset of elements to a next one of the plurality of processors" page 5, [0101]-[0103], [0112]-[0114] and Fig. 30;
- "a feedback component configured to provide a feedback loop between two of the plurality of processors, wherein the feedback component is configured to provide a portion of the group of elements identified by one of the plurality of processors to another one of the plurality of processors such that the processor receiving the portion of the group of elements identifies a new group of elements contained in the portion of the group of elements provided by the feedback component" at page 5, [0105], [0114], [0118], page 12, [0373]-[0392] and Figs. 30, 37.

As per claim 21, Blair teaches the system of claim 20, wherein "the feedback component is configured to provide feedback loops between more than two of the plurality of processors" at Fig. 30.

As per claim 22, Blair teaches the system of claim 20, wherein "a different set of criteria is employed by each of the plurality of processors" at page 5, [0102] and page 12, [0373]-[0392].

As per claim 23, Blair teaches the system of claim 20, wherein "the selection criteria employed by each of the plurality of filters is different" at page 5, [0102].

As per claim 24, Blair teaches the system of claim 20, wherein "the selection criteria is different than the set of criteria" at page 5, [0102].

As per claim 25, Blair teaches the system of claim 20, further comprising: "a utility component configured to control the feedback component, wherein the utility component is configured to determine which portion of the elements are provided to a particular one of the plurality of processors" at page 5, [0112]-[0114].

As per claim 26, Blair teaches the system of claim 25, wherein "the utility component is configured to determine the number of times the feedback component provides the portion of the group of elements to the particular processor" at page 5, [0118].

As per claim 27, Blair teaches the system of claim 23, further comprising: "a tagging processor configured to assign one or more metatags to each of the elements in a database" at page 3, [0073]-[0074].

As per claim 28, Blair teaches the system of claim 20, wherein "the set of criteria employed by each of the processors either set by a user or set automatically" at page 13, [0409]-[0412].

As per claim 33, Blair teaches the system of claim 20, wherein "the set of criteria employed by at least one of the processors is based on syntactic associations of elements in the dataset" at page 5, [0102].

As per claim 35, Blair teaches a system for identifying elements in a dataset including structured, semi-structured or unstructured data comprising a plurality of elements from a plurality of data sources, wherein each of the plurality of elements includes at least one corresponding metatag indicative of content of the corresponding element (Figs. 3, 19), comprising:

- "a plurality of processing levels, wherein each processing level includes a processor configured to identify a group of elements that satisfy a set of criteria" at page 5, [0101]-[0103] and Fig. 30;
- "and a filter configured to extract a subset of the group of elements identified by the processor that satisfy a selection criteria and provide the subset of elements to a next processing level" at page 5, [0112]-[0114];
- "a feedback component configured to provide a feedback loop between two of the processing levels at Figs. 30, 37;
- "wherein the feedback component is configured to provide a portion of the group of elements identified by one of the processing levels to another one of the processing levels" at page 5,[0105], [0114], [0118] and Figs. 30, 37;
- "so that the processing level receiving the portion of the group of elements identifies a new group of elements contained in the portion of the group of elements provided by the feedback component" at page 5,[0105], [0114].

"a utility component configured to control the feedback component, wherein the utility component is configured to determine which portion of the elements are provided to one of the plurality of processors and iteratively adjust the portion of the group of elements in order to maximize results according to a desired utility" at page 5, [0112]-[0114].

As per claim 36, Blair teaches a system for identifying elements in a dataset including structured, semi-structured or unstructured data comprising a plurality of elements from a plurality of data sources, wherein each of the plurality of elements includes at least one corresponding metatag indicative of content of the corresponding element (Figs. 3, 19), comprising:

- "a plurality of processors, wherein each processor is configured to identify a group of elements that satisfy a set of criteria" at page 5, [0112]-[0114] and Fig. 30;
- "a plurality of filters, wherein each filter is configured to extract a subset of the group of elements identified by one of the processors that satisfy a selection criteria and provide the subset of elements to a next one of the plurality of processors" page 5, [0101]-[0103], [0112]-[0114] and Fig. 30;
- "a feedback component configured to provide a feedback loop between two of the plurality of processors, wherein the feedback component is configured to provide a portion of the group of elements identified by one of the plurality of processors to another one of the plurality of processors such that the processor receiving the portion of the group of elements identifies a new group of elements

contained in the portion of the group of elements provided by the feedback component" at page 5, [0105], [0114], [0118], page 12, [0373]-[0392] and Figs. 30, 37.

- "a utility component configured to control the feedback component, wherein the utility component is configured to determine which portion of the elements are provided to one of the plurality of processors and iteratively adjust the portion of the group of elements in order to maximize results according to a desired utility" at page 5, [0112]-[0114].

As per claim 37, Blair teaches a system for identifying elements in a data set including structured, semi-structured or unstructured data comprising a plurality of elements from a plurality of data sources, wherein each of the plurality of elements includes at least one corresponding metatag indicative of content of the corresponding element, comprising:

- "a first filter for filtering a first representation level of the data elements" at page 5, [0101]-[0103], [0112]-[0114] and Figs. 30, 37;
- "a first level processor for transforming the filtered data elements into a second representation level of the data elements" at page 5, [0101]-[0103], [0112]-[0114] and Figs. 30, 37;
- "a second filter for filtering the second representation of the data elements, wherein the second representation level of data elements is at a higher level of abstraction than the first representation level of the data elements" at page 5, [0101]-[0103], [0112]-[0114] and Figs. 30, 37;

- "a feedback component for automatically providing feedback to one of the filters and/or the processor and/or to the first representation level of data element based on the filtered second representation level of the data element" at page 5, [0105], [0114], [0118], page 12, [0373]-[0392] and Figs. 30, 37.

As per claim 38, teaches the system of claim 37, wherein "the feedback controller controls the selection or modification of a parameter for one of the filters and applies a set of algorithms to the data elements before a user view a query result derived from the data elements" at [0099]-[0108].

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

9. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

10. **Claims 29-32** are rejected under 35 U.S.C. 103(a) as being unpatentable over Blair as applied to claims above, and in view of Lindh et al. (US 2005/0149494 A1), hereinafter "Lindh".

As per claim 29, Blair teaches the system of claim 20 as discussed above. Blair teaches different types of searching including lexical, Syntactic and Semantic, but does not explicitly teach "the set of criteria employed by at least one of the processors is based on the pairwise association of the data elements." However, Lindh teaches a similar method for document processing based on a set of criteria, wherein "the set of criteria is based on the pairwise association of data element" at page 1, [0009]-[0010]. Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to combine Blair and Lindh's teachings, in order to improve document classification and searching, as suggested by Lindh. Lindh suggested the use of the "term-term" matrix at page 1, [0010] because "it provides accurate connections between synonymous terms and related expression. This is in turn, constitute a basis for accomplishing high quality document searches, i.e., searches in which highly relevant information is identified."

As per claim 30, Blair and Lindh teach the system of claim 29 as discussed above. Lindh also teaches: "wherein the pairwise associations are based on nouns or noun phrases among the elements of the group" at page 2, [0026] and page 4, [0057]-[0060].

As per claim 31, Blair and Lindh teach the system of claim 30 discussed above. Lindh also teaches: "wherein at least one of the processors generates a pairwise

occurrence matrix" at page 3, [0036], "wherein each element of the matrix being incremented when a pair of nouns or noun phrases occur within a set distance of each other" at page 2, [0026] and page 4, [0057]-[0060].

As per claim 32, Blair and Lindh teach the system of claim 31 as discussed above. Lindh also teaches: "wherein the selection criteria includes establishing a threshold that is used to selects elements of the matrix that have been incremented to at least equal the value of the threshold" at page 8, [0119]-[0125].

11. **Claim 34** is rejected under 35 U.S.C. 103(a) as being unpatentable over Blair as applied to claims above, and in view of Zernik (US 5,383,120 A), hereinafter "Zernik".

As per claim 34, Blair teaches the system of claim 33 as discussed above. Blair teaches different types of searching including lexical, Syntactic and Semantic, but does not explicitly teach wherein "the syntactic associations are based on noun-verb associations and verb-object noun associations among the elements of one of the subsets extracted by one of the plurality of filters". However, Zernik teaches a similar method for document analysis based on the word pairs occurring in the documents (Col. 2 lines 50-67), wherein the word pairs are noun-verb and verb-object noun association (Col. 1 lines 65-68 and Col. 5 lines 45-55) Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to combine Blair and Zernik's teaching in order to improve document classification and searching based on the thematic content of the documents.

Response to Arguments

12. Applicant's arguments filed May 15, 2006 have been fully considered but they are not persuasive. The examiner respectfully traverses applicant's arguments.

Regarding claims 17 and 20, applicant argued that "Blair does not disclose a feedback component as claimed" because "results of the conducted searches are not fed back to a previous search". On the contrary, Blair teaches at Fig. 37 an iterative search process includes a feedback loop, wherein the results of the first search (i.e. "Save groups") are used as input to the second search (i.e. analytics), and the results of the second search (i.e. "New Saved Groups) are used as input to the first search.

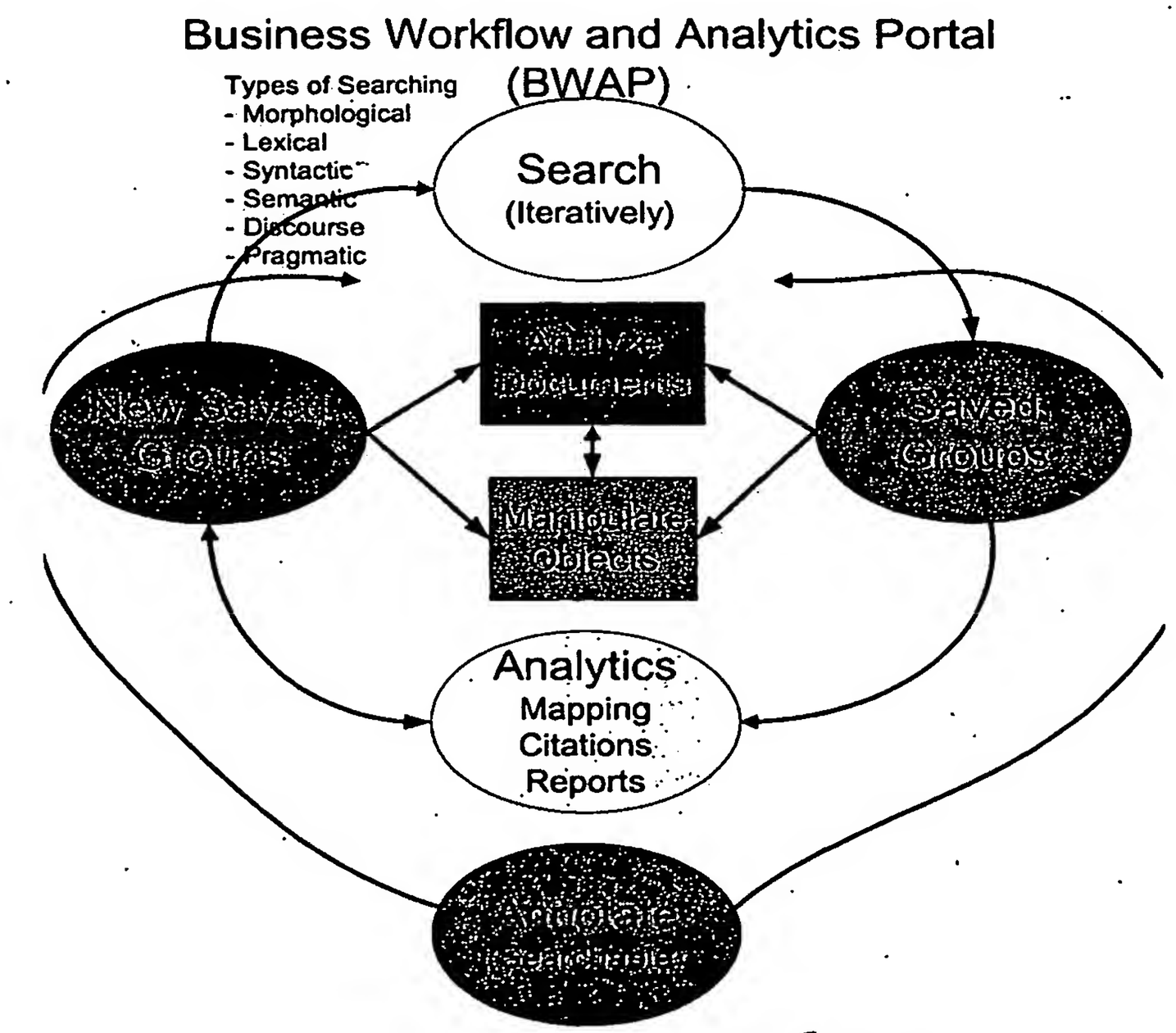

FIG. 37

Regarding claims 18 and 25, applicant argued that Blair does not teach "a utility component configured to control feedback component, wherein the utility component is configured to determined which portion of the elements are provided to a particular one of the processing levels". On the contrary, Blair teaches at [0112] - [0114] that only a subset of the search results (i.e. "sub-groups") is selected as input to another search process, and therefore anticipated the claimed limitations.

In light of the foregoing arguments, the 35 U.S.C 102 and 103 rejections are hereby sustained.

Conclusion

13. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Khanh B. Pham whose telephone number is (571) 272-

4116. The examiner can normally be reached on Monday through Friday 7:30am to 4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hosain Alam can be reached on (571) 272-3978. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Khanh B. Pham
Examiner
Art Unit 2166

August 14, 2006